USSR/Electricity - Oscilloscopes May 52
Circuit-Breakers
Ionic Rectifiers

"Cathode Oscilloscope With Delayed Sweep for Investigating Ionic Rectifiers and High-Voltage Circuit Breakers," Engr S. M. Katsnel'son, Ural Polytech Inst imeni Kirov

PA 240T48 "Elektrichestvo" No 5, pp 48-51

Examines possibility of using grid-controlled thyratrons in oscilloscope circuits and gives circuit for cathode-ray oscilloscope with delayed sweep designed on this principle. Oscilloscopes of this type have been used for 4 years at UPI and on stand of "Uralelektroapparat" Plant. Author's work was done at Chair of High-Voltage Techniques, UPI, under direction of M. M. Akodis. Submitted 27 Jun 51.

240T48

KATSNEL'SON, S. M.

240T48

KATSNEL'SON, S.M., ZHILKIN, A.N.

Electric Power

Economy of electric power, Tekst. prom. 12 no. 8, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952, Unclassified.

KATSNEL'SON, S.M.

2929. Cathode-ray oscillograph supplied by [illegible] pulses [illegible] 1953.

[illegible] oscillograph has the advantage over single-pulse supply that the brightness of the image is increased by the superposition of periodically repeated traces on the first image, although there is a certain danger of a decrease of the primary emission of the oxide cathode by fatigue phenomena. An oscillograph of this type for supply at mains frequency, where the pulses are produced by grid-controlled thyratrons, is described.

B. I. KRAIN

Leit Polytech. Inst. im. Kirov

KALPIN, Grigoriy Zakharovich; KATSNEL'SON, S.M., red.; SAVCHENKO, Ye.V., tekhn.red.

[New wage structure on state farms] Novoe v oplate truda v sovkhozakh. Moskva, Izd-vo "Znanie," 1959. 38 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.32) (MIRA 12:12)
(State farms) (Wages)

KOLESNIKOV, Venedikt Andreyevich, prof., doktor sel'skokhoz.nauk; KATSNEL'SON, S.M., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Further expansion of fruit culture] Za dal'neishee razvitie plodovodstva. Moskva, Izd-vo "Znanie," 1960. 30 p. (Vsesoiuznoe ob-vo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.6). (MIRA 13:4)
(Fruit culture)

DOLINYUK, Yevgeniya Alekseyevna, dvazhdy Geroy Sotsialisticheskogo Truda; VOL'SKIY, V.G., kand.sel'skokhoz.nauk, red.; KATSNEL'SON, S.M., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Corn is a high-yield crop; practices of a field team on the Stalin Collective Farm in the Mel'nitsa-Podol'skaya District, Ternopol Province] Kukuruza - vysokourozhainaia kul'tura; opyt zven'evoi kolkhoza imeni Stalina Mel'nitse-Podol'skogo raiona Ternopol'skoi oblasti. Pod obshchei red. V.G.Vol'skogo. Moskva, Izd-vo "Znanie," 1960. 30 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.13). (MIRA 13:7)
(Mel'nitsa-Podol'skaya District--Corn (Maize))

DOLABERIDZE, Mikhail Melitonovich; KATSNEL'SON, S.M., red.; SAVCHENKO, Ye.V., tekhn.red.

[Subtropical crops of Georgia; tea, citrus fruits, laurel, and others] Subtropicheskie kul'tury Gruzii; chai, tsitrusovye kul'tury, blagorodnyi lavr i dr. Moskva, Izd-vo "Znanie," 1960. 30 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser. , Sel'skoe khoziaistvo, no.20). (MIRA 13:10)

(Georgia--Tropical crops)

MALASHENKO, Ivan Nikitich, Geroy Sotsialisticheskogo Truda; KATSNEL'SON, S.M., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Three lambings in two years; work practices of the shepherd brigade of the Stalin Collective Farm in Kochubeyev District, Stavropol Territory] Tri okota za dva goda; opyt raboty chabanskoi brigady kolkhoza imeni Stalina Kochubeevskogo raiona Stavropol'skogo kraia. Moskva, Izd-vo "Znanie," 1960. 31 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znaniip Ser.5, Sel'skoe khoziaistvo no.7).

(MIRA 13:3)

1. Starshiy chaban kolkhoza imeni Stalina Kochubeyevskogo (byvsh. Nevinnomysskogo) rayona Stavropol'skogo kraya (for Malashenko).
(Kochubeyev District--Sheep breeding)

SPIVAK, Mark Sidorovich; KATSNEL'SON, S.M., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Contribution of the workers of the Ukraine to the advance in agriculture] Vklad truzhenikov Ukrainy v pod"em sel'skogo khoziaistva. Moskva, Izd-vo "Znanie," 1960. 35 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.11). (MIRA 13:6)

1. Ministr sel'skogo khozyaystva USSR (for Spivak).
(Ukraine--Agriculture)

KORABLEVA, Lyudmila Ivanovna; kand.sel'skokhoz.nauk; KATSNEL'SON, S.M., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Applying fertilizers the scientific way; based on the combined experience of the workers of the "Bol'shevik" State Farm and the Soil Institute of the U.S.S.R. Academy of Sciences] Primeniat' udobreniia na nauchnoi osnove; iz opyta tvorcheskogo sodruzhestva rabotnikov sovkhoza "Bol'shevik" i Pochvennogo instituta Akademii nauk SSSR. Moskva, Izd-vo "Znanie," 1960. 37 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, no.2) (Fertilizers and manures)

KATSNEL'SON, S.M.

TERENT'YEV, Makar Leont'yevich; KARPOV, Konstantin Dmitriyevich; KATSNEL'SON, S.M., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Make better use of all possibilities in agriculture] Polnee ispol'zovat' rezervy v sel'skom khoziaistve. Moskva, Izd-vo "Znanie," 1960. 37 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.4) (MIRA 13:2)
(Agriculture)

KRASNOV, Valerian Semenovich; KATSNEL'SON, S.M., red.; SAVCHENKO, Ye.V., tekhn.red.

[Loose housing of cattle; widespread application of the experience of collective and state farms] Besprivialznoe soderzhanie krupnogo rogatogo skota; obobshchenie opyta kolkhozov i sovkhozov. Moskva, Izd-vo "Znanie," 1960. 38 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.5). (MIRA 13:2)

1. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Krasnov).
(Stock and stockbreeding) (Dairy barns)

MILOVANOV, Viktor Konstantinovich, akademik; SOKOLOVSKAYA, Irina Ivanovna, doktor biolog.nauk; KATSNEL'SON, S.M., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Artificial insemination of farm animals; the significance, present-day status, and future application of artificial insemination of farm animals] Iskusstvennoe osemenenie sel'skokhoziaistvennykh zhivotnykh; znachenie, sovremennoe sostoianie i perspektivy primeneniia iskusstvennogo osemeneniia sel'skokhoziaistvennykh zhivotnykh. Moskva, Izd-vo "Znanie," 1960. 38 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.9). (MIRA 13:6)

1. Deystvitel'nyy chlen Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Milovanov).
(Artificial insemination)

KATSNEL'SON S.M.

VOVCHENKO, Nikolay Vasil'yevich, Geroy Sotsialisticheskogo Truda; MEKSIN, David Vladimirovich, agronom; KATSNEL'SON, S.M., red.; SAVCHENKO, Ye.V., tekhn.red.

[Seven-year plan of the collective farm in operation] Semiletnii plan kolkhoza v deistvii. Moskva, Izd-vo "Znanie," 1960. 39 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.1). (MIRA 13:2)

1. Predsedatel' kolkhoza imeni Stalina Shirokovskogo rayona Dnepropetrovskoy oblasti (for Vovchenko).
(Shirokoye District--Agriculture)

KHANAZAROV, Dzhmra Khanazarovich; KUZNETSOVA, Antonina Leont'yevna; KATSNEL'SON, S.M., red.; SAVCHENKO, Ye.V., tekhn.red.

[First year of the seven-year plan for agriculture in Uzbekistan] Pervyi god semiletki v sel'skom khoziaistve Uzbekistana. Moskva, Izd-vo "Znanie," 1960. 39 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.12)
(MIRA 13:6)

1. Ministr sel'skogo khozyaystva Uzbekskoy SSR (for Khanazarov).
2. Zamestitel' nachal'nika planovo-ekonomicheskogo upravleniya Ministerstva sel'skogo khozyaystva Uzbekskoy SSR (for Kuznetsov).
(Uzbekistan--Agriculture)

PROTSEROV, Aleksey Vladimirovich; KATSNEL'SON, S.M., red.; SAVCHENKO, Ye.V., tekhn.red.

[Climate, weather, and crops] Klimat, pogoda i urozhai. Moskva, Izd-vo "Znanie," 1960. 39 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.3)
(MIRA 13:2)
(Crops and climate)

MANUKOVSKIY, Nikolay Fedorovich, Geroy Sotsialisticheskogo Truda; KATSNEL'SON, S.M., red.; SAVCHENKO, Ye.V., tekhn.red.

[Let us employ over-all mechanization on the basis of technical plans; practices of the tractor brigade on the Kirov Collective Farm, Umanskiy District, Voronezh Province] Primeniaem kompleksnuiu mekhanizatsiiu na osnove tekhnologicheskikh kart; opyt traktornoi brigady kolkhoza imeni Kirova Novo-Usmanskogo raiona Voronezhskoi oblasti. Moskva, Izd-vo "Znanie," 1960. 40 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.10).

(MIRA 13:6)

(Umanskiy District--Tractors)

SIZOV, Ivan Aleksandrovich, prof.; KATSNEL'SON, S.M., red.; SAVCHENKO, Ye.V., tekhn.red.

[Hybridization of agricultural plants is a powerful factor in increasing yields] Gibridizatsiia sel'skokhoziaistvennykh rastenii - moshchnyi faktor povysheniia urozhainosti. Moskva, Izd-vo "Znanie," 1960. 43 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.8). (MIRA 13:3)

1. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I. Lenina (for Sizov).
(Plant breeding)

TKACHUK, Georgiy Ivanovich, Geroy Sotsialisticheskogo Truda; KATSNEL'SON, S.M., red.; SAVCHENKO, Ye.V., tekhn.red.

[Experience in the management of the "Ukraina" Collective Farm] Opyt organizatorskoi raboty kolkhoza "Ukraina." Moskva, Izd-vo "Znanie," 1960. 46 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.19). (MIRA 13:10)

1. Predsedatel' khokhoza "Ukraina" (for Tkachuk).
(Gorodok District--Collective farms)

DAVYDOV, Aleksey Petrovich; KATSNEL'SON, S.M., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Inventors and efficiency promoters are fighters for technological progress] Izobretateli i ratsionalizatory - bortsy za tekhnicheskiĭ progress. Moskva, Izd-vo "Znanie," 1960. 47 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.14).

(MIRA 13:7)

1. Nachal'nik otdela izobretatel'stva i ratsionalizatsii Ministerstva sel'skogo khozyaystva SSSR (for Davydov).
(Agricultural machinery)

KAL'BUS, Grigoriy Lavrent'yevich, kand.tekhn.nauk; BOROSHOK, Lev Abramovich, inzh.; KATSNEL'SON, S.M., red.; SAVCHENKO, Ye.V., tekhn.red.

[Mounted agricultural machinery] Navesnaia sel'skokhoziaistvennaia tekhnika. Moskva, Izd-vo "Znanie," 1960. 47 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.21). (MIRA 13:10)
(Agricultural machinery)

RUSAKOV, Georgiy Kuz'mich, kand.sel'skokhoz.nauk; KATSNEL'SON, S.M., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Internal economic planning on collective farms] Vnutrikhoziaistvennoe planirovanie v kolkhozakh. Moskva, Izd-vo "Znanie," 1960. 47 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.22). (MIRA 13:11)
(Collective farms)

KRALIN, Pavel Ivanovich, kand.sel'skokhoz.nauk; KATSNEL'SON, S.M., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Manure-soil composts] Navozno-zemlianye komposty. Moskva, Izd-vo "Znanie," 1960. 47 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.23). (MIRA 13:12)
(Compost)

MOZGOV, Ivan Yefimovich, akademik; KATSNEL'SON, S.M., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Substances promoting the growth of animals] Stimuliatory rosta zhivotnykh. Moskva, Izd-vo "Znanie," 1960. 35 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, no.24). (MIRA 14:1)

1. Deystvitel'nyy chlen Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Mozgov).
(Growth promoting substances)
(Stock and stockbreeding)

LAANMYAE, Vambola Eduardovich [Laanmäe, V.E.], kand.sel'skokhoz.nauk; VOL'TRI, Leonikhard Yur'yevich [Voltri, L.J.], nauchnyy sotrudnik; KATSNEL'SON, S.M., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Fattening meat-type swine; practices of Estonian collective and state farms] Bekonnyi otkorm svinei; iz opyta kolkhozov i sovkhozov Estonskoi SSR. Moskva, Izd-vo "Znanie," 1961. 30 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.3). (MIRA 14:2)

(Estonia--Swine--Feeding and feeds)

ZABAZNYY, Petr Akimovich, kand.sel'skokhoz.nauk; KATSNEL'SON, S.M., red.; SAVCHENKO, Ye.V., tekhn.red.

[New stage in the production of field crop seeds] Novyi etap v semenovodstve sel'skokhozialstvennykh kul'tur. Moskva, Izd-vo "Znanie," 1961. 32 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.4). (MIRA 14:2)
(Field crops) (Seed production)

KATSERL'SON, S.M.

Continuous phase-shifting bridge with a potentiometer-type switching of resistance. Izm.tekh. no.10:45-49 O'60. (MIRA 13:10)
(Bridge circuits)

32967
S/146/61/004/006/006/020
D201/D301

9.6000 (1040, 1139, 1159)

AUTHOR: Katsnel'son, S. M.

TITLE: A resonant phase-shifting bridge

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, v. 4, no. 6, 1961, 39-46

TEXT: The author describes and briefly analyzes the operation of a resonant bridge with a continuous phase-shift of the output voltage up to $360^{\circ}K$ where K is an arbitrary number. The angle of phase shift is independent of the bridge load if the varying load is purely resistive and the reactive load remains constant. The bridge circuit diagram (Fig. 1) is a modification of the phase-shifter as proposed earlier by the author. In the modified bridge phase-shifter a reactance is connected between the central point of the transformer and the potentiometer in parallel with the bridge load R_3. The reactance is tuned to resonate with the constant reactance of the bridge. It is easily shown that the output voltage is shifted with respect to the input by

Card 1/6

A resonant phase-shifting bridge

$$\psi = \operatorname{arctg} \frac{pm(1 - m)}{2m - 1} \qquad (6)$$

where m and p are given by

$$m = \frac{R_1}{R_o} \; ; \; p = \omega C R_o, \; n = \frac{R_3}{R_o}$$

in which $R_o = R_1 + R_2$. Eq. (6) shows that for $p = \sqrt{8}$ the phase shift of the output voltage is nearly a linear function of the rotation of the potentiometer wiper, the non-linearity being less than 1.11% and being independent of loading. The non-linearity is expressed as

Card 2/β_5

A resonant phase-shifting bridge ...

$$\frac{\Psi - m\,180^{\circ}}{180^{\circ}} \cdot 100\%$$

The modulus of the output voltage for this case is, however, minimum and equal to $\sqrt{2}/2$ of that of the input voltage. The bridge design follows its operating requirements. If linearity is not important, the load R_3 is given and constant and p is chosen to lie between 5 and 20. In order that the output voltage does not exceed $\frac{U_0}{2}$, n is found from

$$n = \frac{1}{p - 4} \qquad (12)$$

and then $R_0 = \frac{R_3}{n}$ and $\omega C = \frac{p \cdot n}{R_3}$. If the linearity of phase shift is

A resonant phase-shifting bridge

4

essential, p is taken as $\sqrt{8}$ and n is found from

$$n = \frac{U^*_{min}}{\sqrt{8} - 4U^*_{min}}$$

where

$$U^*_{min} \leqslant \frac{\sqrt{2}}{2}$$

and

$$R_0 = R_3 \left(\frac{\sqrt{8}}{U^*_{min}} - 4 \right); \quad \omega L = \frac{1}{\omega C} = R_3 \left(\frac{1}{U^*_{min}} - \sqrt{2} \right)$$

Card 4/[illegible]

32957

A resonant phase-shifting bridge

S/146/61/004/006/006/020
D201/D301

The above circuit makes it possible to obtain a 180° phase shift of the output voltage. To obtain a phase shift of 360° the reactance connected between the potentiometer wiper and one end of the transformer secondary is switched to the other end at the instant when the wiper of the potentiometer goes through its extreme position. The described phase-shifter may be used in all arrangements and instruments requiring a linear phase-shift of the output voltage with respect to the rotation of the potentiometer wiper and a constant phase-shift with load variations. This article was recommended by the Kafedra tekhniki vysokikh napryazheniy (Department of High Tension Techniques). There are 4 figures and 3 Soviet-bloc references.

ASSOCIATION: Ural'skiy politekhnicheskiy institut im. S. M. Kirova (Ural Polytechnic Institute im. S. M. Kirov)

SUBMITTED: February 11, 1961

Card 5/6

KATSNEL'SON, Semen Markovich, inzh.

Parallel operation of rectifiers and ionic frequency converters. Izv. vys. ucheb. zav.; elektromekh. 5 no.6:666-669 '62. (MIRA 15:10)

1. Kafedra tekhniki vysokogo napryazheniya Ural'skogo politekhnicheskogo instituta.

(Electric current rectifiers)
(Frequency changers)

AKODIS, Mikhail Mironovich, doktor tekhn. nauk, prof.; KATSNEL'SON, Semen Markovich, inzh.

Multimesh series-type electronic frequency converter with joint cathodes. Izv. vys. ucheb. zav.; elektromekh. 5 no.11:1274-1279 '62. (MIRA 15:11)

1. Zaveduyushchiy kafedroy tekhniki vysokogo napryazheniya Ural'skogo politekhnicheskogo instituta (for Akodis).
2. Kafedra tekhniki vysokogo napryazheniya Ural'skogo politekhnicheskogo instituta (for Katsnel'son).

(Frequency changers)
(Electric current converters)

NIKOLAYEV, G.A., inzh.; KATSNEL'SON, S.M., inzh.

Static 75 cycle frequency converter. Avtom., telem. i sviaz' 7 no.6:13-15 Je '63. (MIRA 17:3)

AKODIS, M.M., doktor tekhn. nauk, prof.; KATSNEL'SON, S.M., inzh.

Electronic converter with increased frequency. Elektrichestvo no.1:54-59 Ja '64. (MIPA 17:6)

1. Ural'skiy politekhnicheskiy institut imeni Kirova (for Akodis).
2. Ural'skoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozhnogo transporta.

KATSNEL'SON, S.M.

Experience of the Lugansk Woolen and Worsted Combine in the processing and use of reclaimed wool. Leh. prom. No.4:16-17 O-D '64 (MIRA 18:1)

KATSNEL'SON, S.M., kand. tekhn. nauk; NIKOLAYEV, G.A., inzh.

Frequency regulation of self-excited direct current transformers. Vest. TSNII MPS 24 no.4:40-43 '65. (MIRA 18:7)

1. Ural'skoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozhnogo transporta Ministerstva putey soobshcheniya, Sverdlovsk.

KATSNEL'SON, S.M., kand. tekhn. nauk; LYUBLIN, I.Sh., inzh.; TRET'YAK, T.P., kand. tekhn. nauk; SHIPITSIN, V.V., inzh.

Inverter transformer with increased frequency. Elektrotekhnika 36 no.7: 3-6 Jl '65. (MIRA 18:7)

ABROSIMOV, C.S.; KATSNEL'SON, S.M.; KHLYNIN, M.N., termosvarshchik; ABULADZE, M.A.

Letters to the editor. Put' i put.khoz. 9 no.8:[illegible] '65.
(MIRA 18:8)

1. Starshiy normirovshchik stantsii Serov-Sortirovochnyy, Sverdlovskoy dorogi (for Abrosimov). 2. Glavnyy spetsialist tekhnicheskogo otdela "Kavgiprotrans", Tbilisi (for Katsnel'son). 3. Stantsiya Kirovabad, Zakavkazskoy dorogi (for Khlynin). 4. Nachal'nik rel'sosvarochnogo poyezda, stantsiya Orsha, Belorusskoy dorogi (for Abuladze).

KATSNEL'SON, S.M., kand. tekhn.nauk

Analysis of the work of d.c. converters with parallel inverters operating in an oscillatory mode. Izv. vys. ucheb. zav.; energ. 8 no.5:21-29 My '65. (MIRA 18:6)

1. Ural'skoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozhnogo transporta. Predstavlena kafedroy tekhniki vysokikh napryazheniy Ural'skogo politekhnicheskogo instituta.

L 25459-66 EWA(h)/EWT(1)

ACC NR: AP6011213 SOURCE CODE: UR/0413/66/000/006/0046/0047

INVENTOR: Katsnel'son, S. M.; Nikolayev, G. A.; Tret'yak, T. P.

ORG: none

TITLE: A single-phase relaxation bridge inverter. Class 21, No. 179833 [announced by Ural Department of Scientific Research Institute of Railway Transportation (Ural'skoye otdeleniye, Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozhnogo transporta)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 46-47

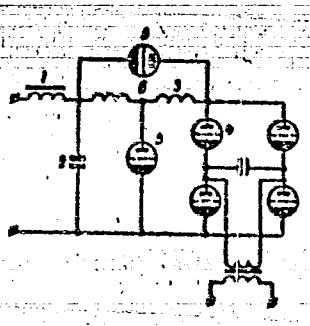
TOPIC TAGS: electric inverter, electric filter, electronic rectifier

ABSTRACT: This Author's Certificate introduces a single-phase relaxation bridge inverter with an inductance-capacitance filter at the input. The inductive reactance in the tank circuit is connected between a group of rectifiers and the filter capacitor. The filter capacitor and the inductance in the tank circuit are used for switching off the inverter in emergency conditions. The emergency disconnection speed is increased and the fixed power of the disconnection equipment is reduced by using two additional controlled rectifiers. The inductive reactance in the tank circuit is divided into two sections and one of the controlled rectifiers is connected in parallel with this reactance while the other rectifier is connected in parallel with the filter capacitor and one section of the reactance.

UDC: 621.314.572.025.
.1:521.316.9

Card 1/2

L 25459-66
ACC NR: AP6011213



1--input inductance; 2--filter capacitor; 3--inductive reactance of the tank circuit; 4--rectifier group of the inverter; 5--additional controlled rectifiers; 6--section of the inductive reactance in the tank circuit

SUB CODE: 09/ SUBM DATE: 09Feb65/ ORIG REF: 000/ OTH REF: 000

Card 2/2

L 39634-66 EWT(1) GD-2

ACC NR: AP6002881 SOURCE CODE: UR/0286/65/000/024/0040/0040

AUTHOR: Akodis, M. M.; Katsnel'son, S. M.; Kurashko, Yu. I. 8 B

ORG: none

TITLE: Frequency converter 25 with a "nonsalient" d-c circuit, Class 21, no. 176974

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 40

TOPIC TAGS: frequency converter, direct current, transformer, electron tube, capacitor, frequency doubling

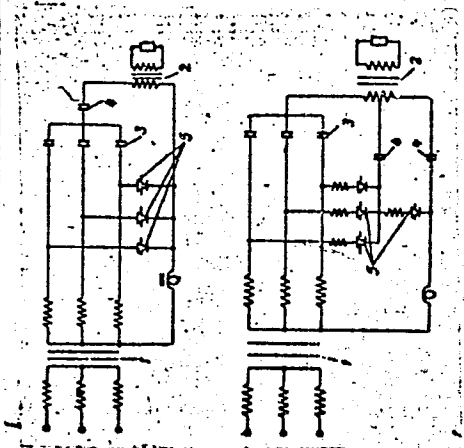
ABSTRACT: The frequency converter with a "nonsalient" d-c circuit, consisting of a power transformer, electron tubes, filter and commutating capacitors, and an output transformer, is characterized by the fact that three filter capacitors joined in a star are connected at the dead center to the output transformer by the commutating capacitor, and phase by phase to the leads of the secondary winding of the power transformer and to the anodes of three electron tubes, whose cathodes are joined and connected to the primary winding of the output transformer. This is done in order to simplify the frequency converter and to increase the utilization of the electron tubes. The converter, is characterized by the fact that a fourth electron tube is connected to

Card 1/2

L 39634-66

ACC NR: AP6002881

the joined cathodes of the three above mentioned electron tubes. This fourth electron tube is also connected through capacitors to the center point of the winding of the output transformer by the anode and to the end of this winding by the cathode. This is done in order to double the frequency.



1. power transformer
2. output transformer
3. filter capacitors
4. Commutating capacitors
5. electron tubes

SUB CODE: 09 SUBM DATE: 25Mar63

Card 2/2 MLP

L 08995-67 EWT(1)

ACC NR: AP6012118 (A, N) SOURCE CODE: UR/0413/66/000/007/0028/0029

AUTHORS: Katsnol'son, S. M.; Trot'yak, T. P. 20

ORG: none

TITLE: Parallel inverter. Class 21, No. 180245 [announced by All-Union Scientific Research Institute of Railroad Transportation (Ural Branch) (Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo transporta (Ural'skoye otdeleniye))]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 7, 1966, 28-29

TOPIC TAGS: gas rectifier, electric inverter, electric capacitor, RC circuit

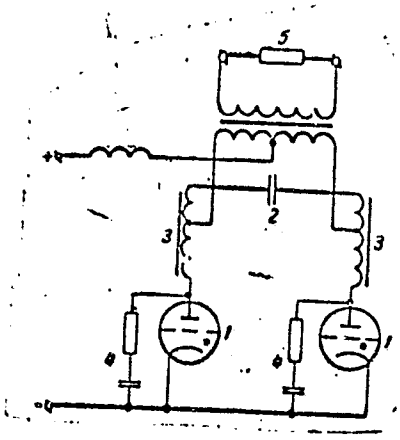
ABSTRACT: This Author Certificate presents a parallel inverter of controllable ion rectifiers. It contains a switching capacitor, saturable reactors connected in series in the rectifier anode circuits, and damping RC circuits. To reduce the probability of reverse triggering and to improve the reliability of operation, the switching capacitor is connected between the saturable reactors. The reactors are of the autotransformer type to whose taps the load is connected (see Fig. 1).

Card 1/2 UDC: 621.314.572

L 08995-67

ACC NR: AP6012118

Fig. 1. 1 - controllable ion rectifiers; 2 - switching capacitor; 3 - saturable reactors; 4 - damping RC circuits; 5 - load



Orig. art. has: 1 diagram.

SUB CODE: 09/ SUBM DATE: 09Feb65

Card 2/2

ACC NR: AP7000322 (A) SOURCE CODE: UR/0413/66/000/022/0060/0060

INVENTOR: Katsnel'son, S. M.; Koshchèyev, L. G.; Tret'yak, T. P.

ORG: none

TITLE: Converter. Class 21, No. 188566. [announced by the Ural Branch of the All-Union Scientific Research Institute of Railway Transportation (Ural'skoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta zheleznodorozhnogo transporta)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 22, 1966, 60

TOPIC TAGS: ~~railway transportation~~, nonrotary electric power converter, RC circuit, resistor

ABSTRACT: The proposed converter contains several autonomous inverters operating in parallel and synchronized by the action on their grid control systems. To simply the control system and to increase its reliability the inverters are self-controlled with phase-shifting RC or RL circuits in the grid control systems. A resistor is included between the connection points of elements of the phase-shifting circuits of neighboring inverter. Orig. art. has: 1 figure.

Card 1/2 UDC: 621.314.572.072.9

ACC NR: AP7000322

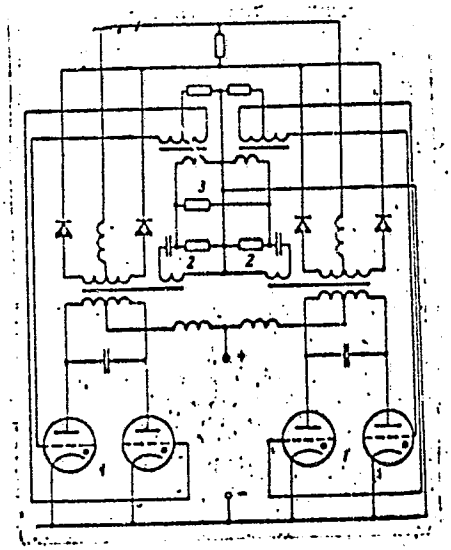


Fig. 1. Converter

1 - Autonomous inverters
2 - phase-shifting circuits
3 - resistance.

SUB CODE: 10,09/ SUBM DATE: 09Feb65

Card 2/2

KATSNEL'SON, S.M.

Resonance phase-shifting bridge. Izv.vys.ucheb.zav.; prib. 4 no.6:39-46 '61. (MIRA 14:12)

1. Ural'skiy politekhnicheskiy institut imeni Kirova. Rekomendovana kafedroy tekhniki vysokikh napryazheniy.
(Bridge circuits)

KATSNEL'SON, S.M., inzh.; SHVARTS, G.K., inzh.

Methods for automatic voltage control of self-regulated autonomous ionic frequency converters. Elektrichestvo no.11:71-76 N '62. (MIRA 15:11)

(Frequency changers) (Electric current converters)

EMETS, V · KATSNEL'SON, V.

Fi. and labor productivity. Sots. trud 8 no.1:43-47 Ja '63. (MIRA 16:2)

1. Odesskiy sovet narodnogo khozyaystva (for Yemets).
2. Direktor shveynogo ob'yedineniya imeni Vorovskogo, Odessa.
(Odessa Province—Clothing industry—Labor productivity)

KATSNEL'SON, V.B.; RYLOV, V.A.; MANUYLOV, P.N., inzh., red.;
MORGULIS, L.S., ved. red.; GLAZOVA, G.D., tekhn. red.

[Experience in the automation of the turbine departments of electric power plants]Opyt avtomatizatsii turbinnykh tsekhov elektrostantsii. Moskva, Biuro tekhn. informatsii, 1961. 25 p.
(MIRA 15:12)

(Electric power plants)
(Automatic control) (Steam turbines)

KAT[illegible]SON, V. I., TARAKONOVSKIY, A. A., and PALEYEV, I. I.

"Diffusion Method of Investigation of Heat and Mass Transfer Between a Particle and Pulsing Medium."

Report submitted for the Conference on Heat and Mass Transfer, Minsk, BSSR, June 1961.

KATSNELSON, V. S.

"V. S. Katsnelson: Biotic Factors of the Medium (Environment) and Their Classifications." (p. 205.)

SO: Journal of General Biology, Vol. VI, contents of the issues 1-6, for 1945. No. 3

KATSNEL'SON, V. Yu.

LAPIN, N.A.; KATSNEL'SON, V. Yu.

[Rapid machining of steel during removal of a large cut] Skorostnoe techenie stali pri sniatii struzhki krupnogo secheniia. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroitel'noi lit-ry, 1952. 92 p. (MLRA 8:10)

(Steel) (Metal cutting)

LAPIN, N.A., KATSNEL'SON, V.Yu.; BALANDIN, A.F., inzhener, redaktor; UVAROVA, A.F., tekhnicheskiy redaktor

[Curling of shavings according to the innovator A.I.Merkulov's method] Struzhkozavivanie po metodu novatora A.I.Merkulova. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroitel'noi lit-ry, 1955. 28 p. (MLRA 8:7)

(Metal cutting)

KATSNEL'SON, V. Yu.

KATSNEL'SON, V.Yu., inzhener.

Investigating new types of hard titanium alloys by grinding steel with removal of large shavings. [Trudy] TSNIITMASH no.82:112-139 '57. (MLRA 10:9)

(Titanium alloys--Testing) (Steel--Cold working)

KATSNEL'SON, V. Yu.

PHASE I BOOK EXPLOITATION SOV/5116

Akademiya nauk SSSR. Institut mashinovedeniya

Instrumental'nyye rezhushchiye materialy (Cutting-Tool Materials) Moscow, Izd-vo AN SSSR, 1960. 137 p. 6,000 copies printed.

Resp. Ed.: A. I. Isayev, Doctor of Technical Sciences, Professor; Ed. of Publishing House: G. B. Gorshkov; Tech. Ed.: E. F. Yegorova.

PURPOSE: This collection of articles is intended for scientific personnel and production engineers engaged in the manufacture and use of cutting tools.

COVERAGE: The collection contains papers read at a seminar on cutting-tool materials organized and sponsored by the Komissiya po tekhnologii mashinostroyeniya (Commission on Processing in Machine Building). The seminar investigated the cutting properties of ceramic and carbide tool materials, the effect of temperature on cutting edges, the problem of wear, and the possibility of using cutting tools more efficiently. No personalities are mentioned. References accompany each article. There are 81 references: [illegible] and 2 English.

Reznikov, A. N. Temperature [Distribution] on the Surfaces of the Cutting Tools, and the Wear of Cutting Edges 49

Klushin, M. I. On Calculating the Strength of the Cutting Portion of Tools 63

Kravchenko, B. A. Pressure on the Flank of the Tool 71

Katsnel'son, V. Yu. Special Features of the Wear of Hard Alloys in [illegible]ing Coarse Chips 79

Reznikov, N. I. Mechanics of Wear of Hard-Alloy Cutting Tools 92

Lasshnik, S. D. Investigating the Intensity of Wear of a Hard-Alloy Tool 106

Makarov, A. D. Problems of Accuracy and Surface Roughness in the Fine Turning of Steels With TsM332 Ceramic Single-Point Tools 115

Itkin, M. E., and S. S. Kupidonov. Machining High-Strength Steels With Ceramic-Tipped Single-Point Tools 125

AVAILABLE: Library of Congress

VK/wrc/fal
5-15-61

Card 3/3

(9)

ZOREV, N.N., doktor tekhn.nauk; TASHLITSKIY, N.I., kand.tekhn.nauk; KUCHMA, L.K., kand.tekhn.nauk; VERSHINSKAYA, A.D., inzh.; OVUMYAN, G.G., inzh.; ISAYEV, A.I., doktor tekhn.nauk; KIRILLOVA, O.M., kand.tekhn.nauk; KATSNEL'SON, V.Yu., inzh.; LAPIN, N.A., kand.tekhn.nauk; FEDOROV, N.M., inzh.; CHERNYY, A.P., inzh.; MOROZOV, N.A., inzh.; DOGAK, N.S.; ANDREYEV, G.S., kand.tekhn.nauk; MIKHAYLENOK, Ye.I., kand.tekhn.nauk; MAKAREVICH, B.K., kand.tekhn. nauk; YEREMIN, N.I., kand.tekhn.nauk; YERMOLOV, I.N.; inzh.; UNKSOV, Ye.P., doktor tekhn.nauk, prof., red.; SOBOLEVA, G.N., red.izd-va; CHERNOVA, Z.I., tekhn.red.

[Engineering problems in the manufacture of heavy machinery] Nekotorye voprosy tekhnologii tiazhelogo mashinostroeniia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroitel'noi lit-ry. Pt. 2 [Metal cutting and quality control of parts] Obrabotka metallov rezaniem in kontrol' kachestva detalei. 1960. 173 p. (Moscow. TSentral'nyi nauchno-issledovatel'skii institut tekhnologii i mashinostroeniia. [Trudy], vol.99). (MIRA 13:8)

(Machinery industry)
(Metal cutting)
(Quality control)

KATSOBASHVILI, V.Ya.; SAFRONENKO, Ye.D.; AFANAS'YEV, I.B.

Determination of the chain transfer constants in the reaction of ethylene with ethyl iodide. Vysokom. soed. 7 no.5:823-827 My '65. (MIRA 18:9)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut azotnoy promyshlennosti i produktov organicheskogo sinteza.

ACC NR: AP6035884 SOURCE CODE: UR/0413/66/000/020/0124/0124

INVENTOR: Badayeva, A. A.; Pervaya, A. S.; Tutov, I. Ye.; Katsnel'son, V. Yu.; Kuz'mintsev, V. N.; Koloskov, M. M.; Kulinich, V. P.

ORG: none

TITLE: High speed steel. Class 40, No. 187314 [announced by the Central Scientific Research Institute of Technology and Machine Building (Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya); All-Union Scientific Research Tool Institute (Vsesoyuznyy nauchno-issledovatel'skiy instumentalnyy institut)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 124

TOPIC TAGS: high speed steel, chromium tungsten molybdenum steel, vanadium containing steel, titanium containing steel, DUCTILITY, TOUGHNESS

ABSTRACT: This Author Certificate introduces a high-speed steel containing silicon, manganese, chromium, tungsten, molybdenum, vanacium and titanium. To improve the strength, ductility, notch toughness, and oxidation and heat resistance and to reduce carbide heterogeneity, the steel composition is set as follows: 0.75—0.85% carbon, 0.17—0.35% silicon, 0.20—0.40% manganese, 3.5—4.5% chromium, 2.5—3.0% tungsten, 2.5—3.0% molybdenum, 1.9—2.2% vanadium, 0.03—0.08% titanium.

SUB CODE: 11/ SUBM DATE: 05Jun65/

Card 1/1 UDC: 669.14.018.252.3

KATSNEL'SON, Ye., inzh.

Standard designs of garages for passenger automobiles. Avt. transp. 37 no.7:23-25 Jl '59. (MIRA 12:10)
(Garages)

KATSNEL'SON, Ye., inzh.

Modernization of automotive transportation units in Leningrad.
Avt.transp. 38 no.3:18-19 Mr '60. (MIRA 13:6)
(Leningrad—Transportation, Automotive)

MALYAR, S.A.; FRIDENTAL, S.Kh.; KATSNEL'SON, Ye.A.; KUZNETSOV, F.F.; LIBER, V.P.; DEGTYAREV, I.T.

Fork lift with hydraulic control for the T-107 tractor loader. Rats. i izobr.predl. v stroi. no.89:6-9 '54. (MLRA 9:6)
(Lumbering--Machinery) (Loading and unloading)

KATSNEL'SON, YE. N

33596 Sluchay Atipichno Protekavshego Tonzillogennogo Sepsisa. Vestnik Otorinolaringologii, 1949, No, 5, C. 77-78

SO: Letopis'nykh Statey, Vol. 45, Moskva, 1949

KATSNEL'SON, E.N.

Comparative characteristics of scarlatinal aural, nasal and laryngeal complications for the past 10 years (1937-1947). Vest.otorinolar. 13 no.1:82 Jan-Feb 51. (CLML 20:5)

1.Candidate Medical Sciences. 2. Of the Clinic for Diseases of the Ear, Throat, and Nose (Acting Head--Prof.I.M.Rozenfel'd), Leningrad Institute for the Advanced Training of Physicians imeni S.M.Kirov and of the Hospital imeni V.Slutskaya (Head Physician--S.G.Shakhbudagov).

1. KATSNEL'SON, YE. N.

2. SSSR (600)

4. Nose, Accessory Sinuses of

7. Hemorrhage following puncture of the maxillary sinus in myeloid leukemia. Vest. oto-rin. 14 No. 6, 1952

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

KATSNEL'SON, Ye.N., kandidat meditsinskikh nauk.

Treatment of certain broncho-pulmonary diseases with intratracheal penicillin with ephedrine, Vest.oto-rin. 15 no. 4:90 Jl-Ag '53.

Bol'nitsa im. Sverdlova, Leningrad. (Lungs--Diseases) (Bronchi--Diseases)

EXCERPTA MEDICA Sec.11 Vol.10/10 Oto-Rhino-Laryngo Oct 57

KATSNELSON E. N.

1857. KATSNELSON E. N. Leningrad. *Treatment of closed oesophageal lesions and their complications (Russian text) VESTN. OTO-RINO-LARING. 1957, 2 (17-21)

In closed oesophageal lesions and their complications, early conservative treatment is preferential to operative intervention and, if indicated, surgical aid should be sparing. The treatment of closed oesophageal lesions and their complications consists in the following: (1) Exclusion of the oesophagus from the process of food intake for 6 - 7 days. (2) Massive doses of antibiotics as early as possible. (3) The use of lipiodol or sezgosine and not barium in radioscopy of the oesophagus. Feeding is effected by i.v. administration of glucose, transfusions of blood and saline solutions, vitamins, nutritive enema.

Chair of diseases of Ears, Nose & Throat
Leningrad Ol Inst Advanced
Training of Physicians

KATSNEL'SON, Ye.N., kand.med.nauk

Nevogenic tumor of the nose. Vest.otorin. 21 no.5:94-95 S-O '59.
(MIRA 13:1)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. - prof. V.G. Yermolayev) Leningradskogo ordena Lenina instituta usovershenstvovaniya vrachey imeni S.M. Kirova i bol'nitsy imeni Lenina.
(NOSE, neoplasms)
(MELANOMA, case reports)

KATSNEL'SON, Ye.N., kand.med.nauk

Plasmocytoma of the pharynx. Vest.otorin. no.6:96-97 '61.
(MIRA 15:1)

1. Iz kliniki bolezney ukha, nosa i gorla (zav. kafedroy - prof. V.G. Yermolayev) Leningradskogo ordena Lenina instituta usovershenstvovaniya vrachey imeni S.M. Kirova.
(PHARYNX—TUMORS)

KATSNEL'SON, Ye.N., kand.med.nauk

Three cases of a benign tumor of the external auditory canal. Zhur.ush., nos.i gorl.bol. 22 no.2:68-69 Mr-Ap '62. (MIRA 15:11)

1. Iz kliniki bolezney ukha, gorla i nosa (zav. - prof. V.G. Yermolayev) Leningradskogo Ordena Lenina instituta usovershenstvovaniya vrachey imeni S.M.Kirova i Otorinolaringologicheskogo otdeleniya bol'nitsy imeni Lenina.

(EAR--TUMORS)

KATSNEL'SON, Ya.N., kand. med. nauk

Case of progressive congenital labyrinth hearing disorder. Vest. oto-rin. 25 no.2:102-103 Mr-Ap '63.
(MIRA 17:1)

1. Iz kliniki bolezney ukha, nosa i gorla (zav. kafedroy - prof. V.G. Yermolayev) Leningradskogo ordena Lenina instituta usovershenstvovaniya vrachey imeni S.M. Kirova i bol'nitsy imeni V.I. Lenina, Leningrad.

SOURCE: Plasticheskiye massy, no. 4, 1965, 16-22

ABSTRACT: Hardening phenomena occurring in p[illegible]ater resins are discussed. The substance tested was a 70% styrol mixture of polyethylene glycol maleinatadvmate. The mixture was cured at controlled ambient temperature, and measurements of

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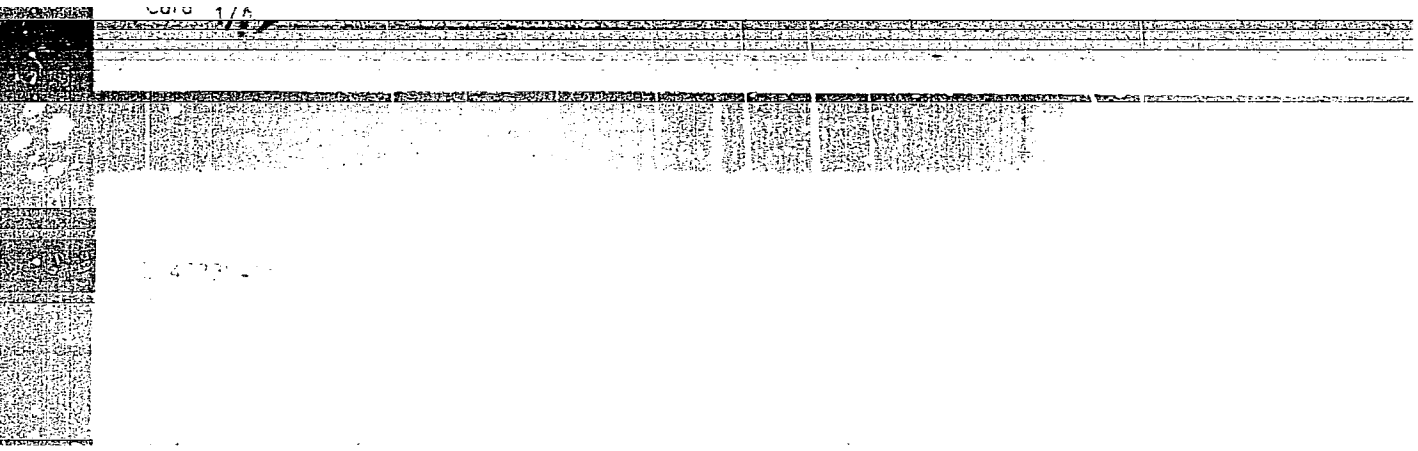


ASSOCIATION: none

NO REF SOV: 001 OTHER: 006

L 13019-63 EPF(c)/EPR/EWP(j)/EWT(m)/BDS AFFTC/ASD Pr-4 Ps-4 Pr-4 RM/WW
ACCESSION NR: AP3000409 S/0192/63/000/005/0067/0068

AUTHOR: Nikolayev, A. F.; Levitskaya, O. M.; Brysentsova, L. M.; Katsnel'son, Ye. Z.

TITLE: Some characteristics of an epoxy-phenol binder for SVAM

SOURCE: Plasticheskiye massy*, no. 5, 1963, 67-68

TOPIC TAGS: SVAM, epoxy-phenol binder, epoxy phenol resin

ABSTRACT: SVAM is prepared from a basic material containing 70% epoxy resin (ED-6) and 30% resol resin; its physico-mechanical properties are dependent on the composition and properties of the epoxy-phenol resin. The resin described here was obtained by combining acetone solutions of ED-6 resin (17-18% epoxy-groups) with a resol phenol-formaldehyde resin (9-10% free phenol) in a ratio of 70:30. It kept well for 60 days, but did not undergo satisfactory hardening even after 30 minutes at 140-200C. An insoluble (non-hardening) portion of 15% or more always remained, lowering the thermostability and rigidity of the material and affecting its physico-mechanical properties. It is suggested that thermosetting might be improved by modifying the composition of the epoxy-phenol resin, matching it with a special resol phenol-formaldehyde resin, and using a catalyst. Orig. art. has: 3 figures.

Card 1/2

KATSNEL'SON, Yu., inzh.

Climatic zoning of Turkmenistan for city planning. Zhil. stroi. no.9:17-19 '64. (MIRA 17:12)

KATSNEL'SON, Yu., inzh.

Urban development in the Turkmen S.S.R. Zhil. stroi. no.2:14-15 F '61. (MIRA 14:1)
(Turkmenistan--City planning)

DUGUYEV, V.; KATSNEL'SON, Yu., inzhener

Apartment-house construction in Turkmenia. Zhil. stroi. no.6:11-14 '62. (MIRA 15:7)

1. Direktor instituta Turkmengosproyekt (for Duguyev).
(Turkmenistan--Apartment houses)

KATSNEL'SON, YU. D.

"History of Natural Science" (Istoriya Yestestvoznaniya), compiled by O. A. Staronel'-skaya-Nikitina assisted by O. Z. Krasnoukhova and Yu. D. Katsnel'son, edited by D. D. Ivanov and N. A. Figurovskiy, Academy of Sciences USSR, Moscow/Leningrad, 1949, 516 pages, 55 rubles.

Bibliographical data on materials published from 1917 to 1947 by Soviet scientists.

SO: Uspekhi Khimii, Vol 18, #6, 1949; Vol 19, #1, 1950 (W-10083)

L 13019-63 EPF(c)/EPR/EWP(j)/EWT(m)/BDS AFFTC/ASD Pr-4/Ps-4/Pc-4 RM/WW

ACCESSION NR: AP3000408 S/0191/63/000/005/0067/0068

AUTHOR: Nikolayev, A. F.; Levitskaya, O. M.; Brusentsova, L. M.; Katsnel'son, Ye. Z.

TITLE: Some characteristics of an epoxy-phenol binder for SVAM

SOURCE: Plasticheskiye massy*, no. 5, 1963, 67-68

TOPIC TAGS: SVAM, epoxy-phenol binder, epoxy phenol resin

ABSTRACT: SVAM is prepared from a basic material containing 70% epoxy resin (ED-6) and 30% resol resin; its physico-mechanical properties are dependent on the composition and properties of the epoxy-phenol resin. The resin described here was obtained by combining acetone solutions of ED-6 resin (17-18% epoxy-groups) with a resol phenol-formaldehyde resin (9-10% free phenol) in a ratio of 70:30. It kept well for 60 days, but did not undergo satisfactory hardening even after 30 minutes at 140-200C. An insoluble (non-hardening) portion of 15% or more always remained, lowering the thermostability and rigidity of the material and affecting its physico-mechanical properties. It is suggested that thermosetting might be improved by modifying the composition of the epoxy-phenol resin, matching it with a suitable resol phenol-formaldehyde resin, and using a catalyst. Orig. art. has:

Card 1/2

KATSNEL'SON, Z.N.

22080 Katsnel'son, Z.N. Primeneniye penitsillina pri nekotorykh khirurgicheskikh zabolevaniyakh. V sb: Penitsillinoterapiya, M., 1949, s. 119-27

SO: Letopis' Zhurnal'nykh Statey, No. 29, Moskva, 1949.

KAZNELSON, Z. S.

"Hystogenesis of the Stricted Muscle Tissue", (p. 1024) by Kaznelson, Z. S.

SO: Advances in Contemporary Biology (USPEKKI SOVREMENNOI BIOLOGII) Vol. V, No. 6, 1936

KAZNELSOV, S.

"Hoffmann, H., Guide to Histologic investigations." (German) (p. 159) Rev. by Kaznelsov, S.

SO: Advances in Contemporary biology (Uspekki Sovremennoi Biologii) Vol. VII, No. 1, 1937.

KATZNELSON, Z. S.

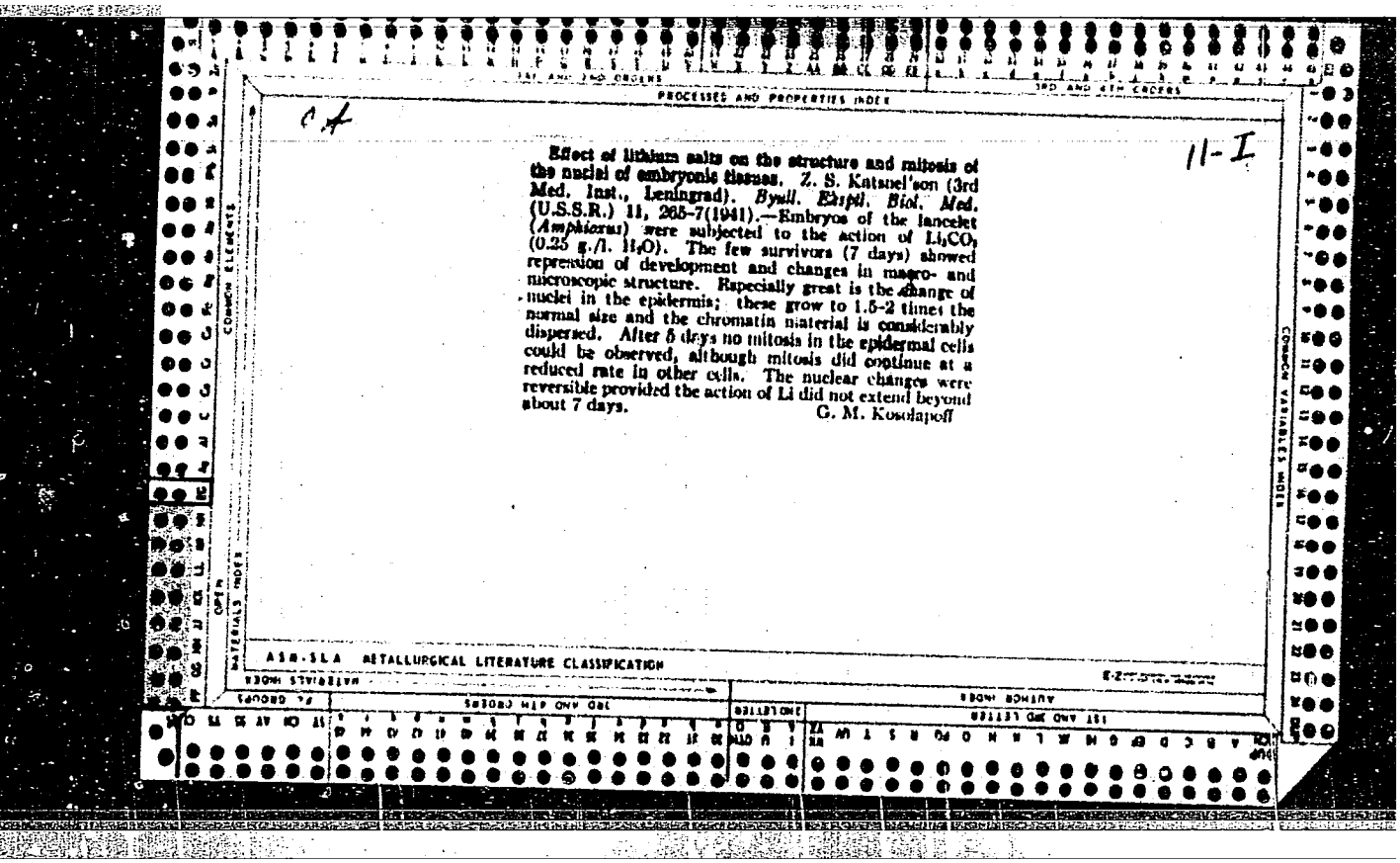
"The Principal Stages of the History of Cell-Doctrine" (p. 96)by Katznelson, Z. D.

SO: Advances in Contemporary Biology, (Uspekhi Sovremennoi Biologii), Vol. X, No. 1, 1939

KAZNELSON, Z. C.

"Kaznelson, Z. C., Hundred years of cell-theory" (p. 570) Rev. by Salkind, S. J.

SO: Advances in Modern Biology (Uspekhi Sovremennoi Biologie) Vol. XII, No. 3, 1940



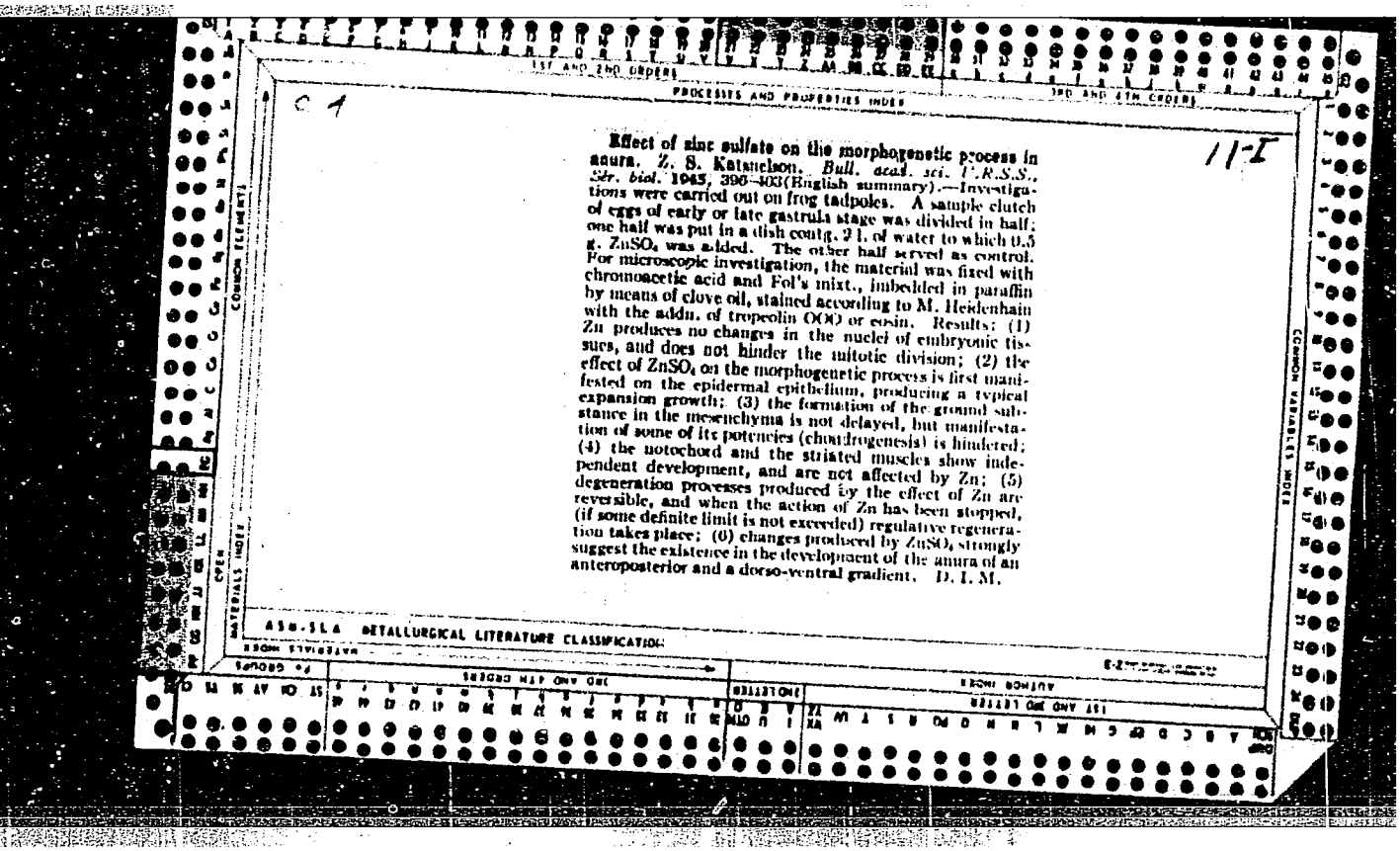
PROCESSES AND PROPERTIES INDEX

11-I

Effect of lithium salts on the structure and mitosis of the nuclei of embryonic tissues. Z. S. Katsnel'son (3rd Med. Inst., Leningrad). *Byull. Eksptl. Biol. Med.* (U.S.S.R.) 11, 265-7(1941).—Embryos of the lancelet (*Amphioxus*) were subjected to the action of Li_2CO_3 (0.25 g./l. H_2O). The few survivors (7 days) showed repression of development and changes in macro- and microscopic structure. Especially great is the change of nuclei in the epidermis; these grow to 1.5-2 times the normal size and the chromatin material is considerably dispersed. After 5 days no mitosis in the epidermal cells could be observed, although mitosis did continue at a reduced rate in other cells. The nuclear changes were reversible provided the action of Li did not extend beyond about 7 days.

G. M. Kosolapoff

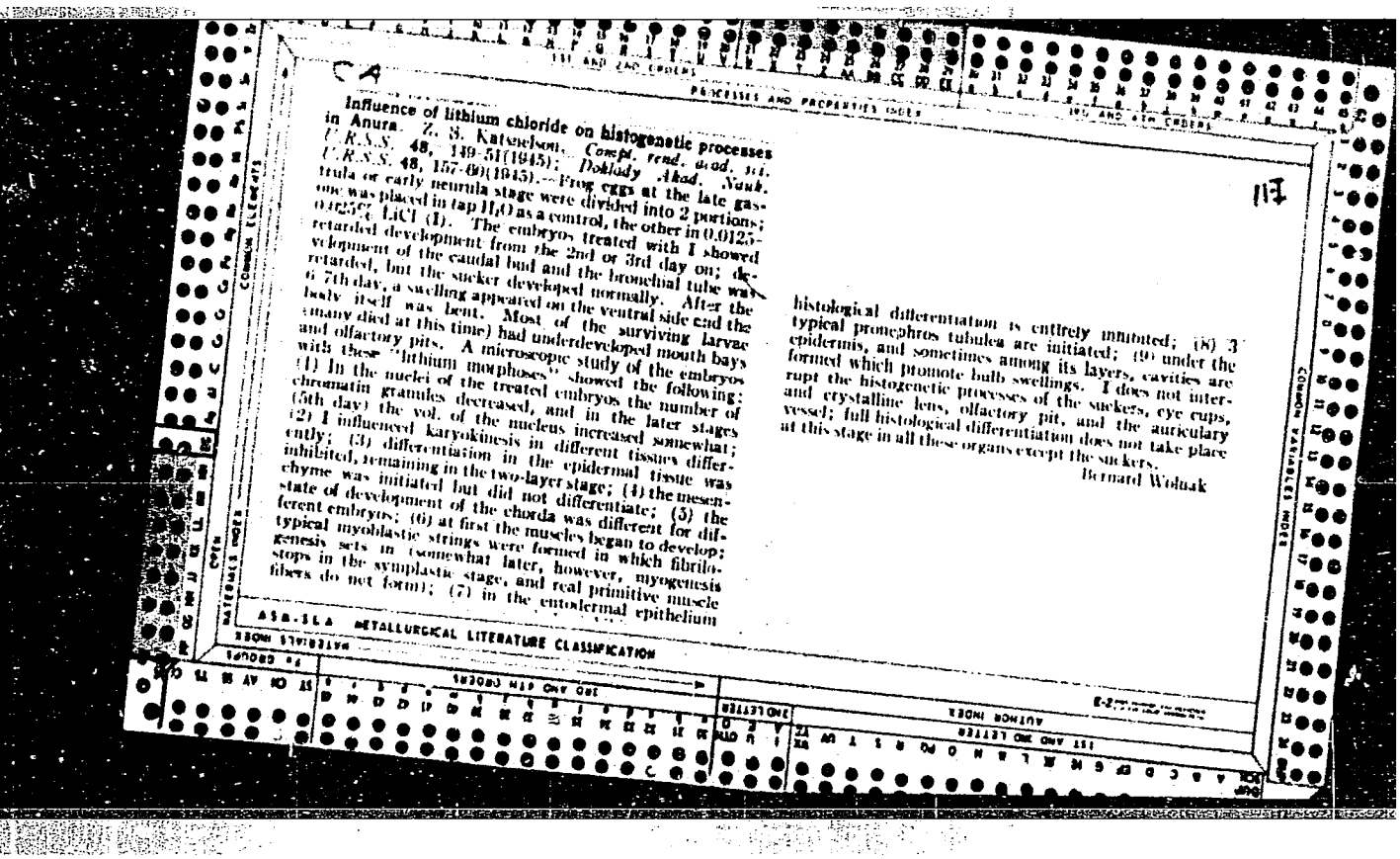
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



C 1

11-E

Effect of zinc sulfate on the morphogenetic process in anura. Z. S. Katsnelson. *Bull. acad. sci. U.R.S.S., Sér. biol.* 1945, 396–403(English summary).—Investigations were carried out on frog tadpoles. A sample clutch of eggs of early or late gastrula stage was divided in half; one half was put in a dish contg. 2 l. of water to which 0.5 g. $ZnSO_4$ was added. The other half served as control. For microscopic investigation, the material was fixed with chromoacetic acid and Fol's mixt., imbedded in paraffin by means of clove oil, stained according to M. Heidenhain with the addn. of tropeolin OOO or eosin. Results: (1) Zn produces no changes in the nuclei of embryonic tissues, and does not hinder the mitotic division; (2) the effect of $ZnSO_4$ on the morphogenetic process is first manifested on the epidermal epithelium, producing a typical expansion growth; (3) the formation of the ground substance in the mesenchyma is not delayed, but manifestation of some of its potencies (chondrogenesis) is hindered; (4) the notochord and the striated muscles show independent development, and are not affected by Zn; (5) degeneration processes produced by the effect of Zn are reversible, and when the action of Zn has been stopped, (if some definite limit is not exceeded) regulative regeneration takes place; (6) changes produced by $ZnSO_4$ strongly suggest the existence in the development of the anura of an anteroposterior and a dorso-ventral gradient. D. I. M.



CA

PROCESSES AND PROPERTIES INDEX

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Influence of lithium chloride on histogenetic processes in Anura. Z. S. Katsnelson. *Compt. rend. acad. sci. U.R.S.S.* **48**, 149–51(1945); *Doklady Akad. Nauk. U.R.S.S.* **48**, 157–60(1945).—Frog eggs at the late gastrula or early neurula stage were divided into 2 portions; one was placed in tap H_2O as a control, the other in 0.0125–0.025% LiCl (I). The embryos treated with I showed retarded development from the 2nd or 3rd day on; development of the caudal bud and the bronchial tube was retarded, but the sucker developed normally. After the 6–7th day, a swelling appeared on the ventral side and the body itself was bent. Most of the surviving larvae (many died at this time) had underdeveloped mouth bays and olfactory pits. A microscope study of the embryos with these "lithium morphoses" showed the following: (1) In the nuclei of the treated embryos the number of chromatin granules decreased, and in the later stages (5th day) the vol. of the nucleus increased somewhat; (2) I influenced karyokinesis in different tissues differently; (3) differentiation in the epidermal tissue was inhibited, remaining in the two-layer stage; (4) the mesenchyme was initiated but did not differentiate; (5) the state of development of the chorda was different for different embryos; (6) at first the muscles began to develop; typical myoblastic strings were formed in which fibrillogenesis sets in (somewhat later, however, myogenesis stops in the symplastic stage, and real primitive muscle fibers do not form); (7) in the entodermal epithelium histological differentiation is entirely inhibited; (8) 3 typical pronephros tubules are initiated; (9) under the epidermis, and sometimes among its layers, cavities are formed which promote bulb swellings. I does not interrupt the histogenetic processes of the suckers, eye cups, and crystalline lens, olfactory pit, and the auriculary vessel; full histological differentiation does not take place at this stage in all these organs except the suckers.

Bernard Woluak

A58-51A METALLURGICAL LITERATURE CLASSIFICATION

KATSNEL'SON, Z. S.

(3)

(7.)"Formation of the First Blood Cells from Part of the Lateral Leaves of Moss,"

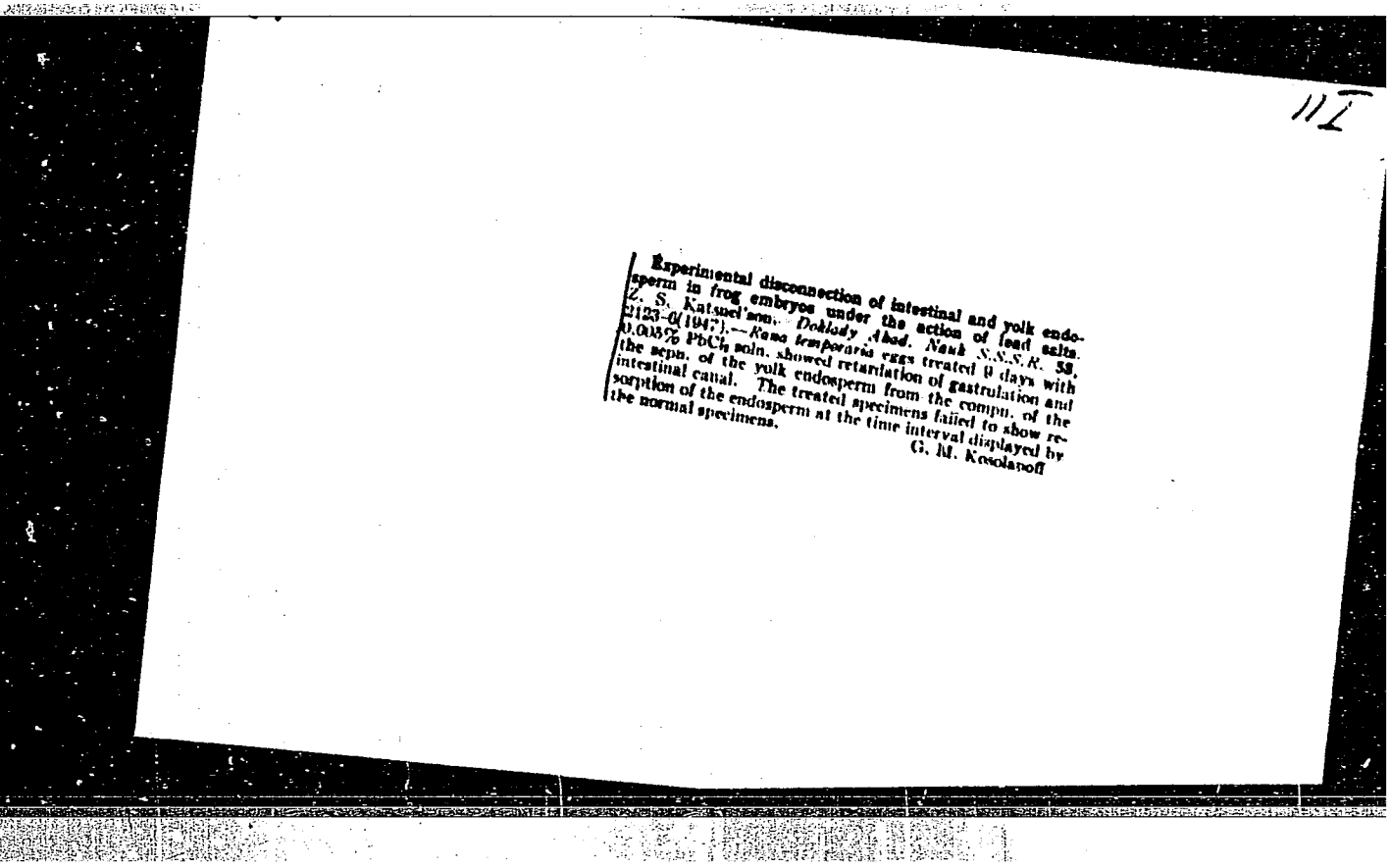
Dok. AN, 54, No. 7, 1946

KATSNEL'SON, Z. S.

Mbr., Army-Navy Medical Academy, Chair of General Biology (-1947-)

"Experimental Separation under the Influence of Lead Salts of the Yolk and Intestinal Entoderms in the Frog Embryo," Dok. AN, 58, No. 9, 1947

"The Structure of Miofibril of Transverally Striated Skeletal Muscle Fiber," Dok. AN, 58, No. 7, 1947



Experimental disconnection of intestinal and yolk endosperm in frog embryos under the action of lead salts. Z. S. Katsnel'son. *Doklady Akad. Nauk S.S.S.R.* 59, 2123–6 (1947).—*Rana temporaria* eggs treated 9 days with 0.005% $PbCl_2$ soln. showed retardation of gastrulation and the segm. of the yolk endosperm from the compn. of the intestinal canal. The treated specimens failed to show resorption of the endosperm at the time interval displayed by the normal specimens.

G. M. Kosolapoff

KATSNEL'SON Z. S. Prof

PA 9/49T64

USSR/Medicine - Histology Sep 48
Medicine - Embryology

"Bibliography of Soviet Literature on Histology and Embryology," Prof Z. S. Katsnel'son, ½ p

"Priroda" No 9

Chair of Gen Biol, Nav Med Acad, is preparing a bibliography of Soviet literature on histology and embryology for 30 years of Soviet rule. Requests all scientists to communicate with Med Acad and submit bibliographies of their work.

[redacted] 9/49T64

PA 3/49T64

KATSNEL'SON, Z. S.

USSR/Medicine - Embryology Mar/Apr 48
Medicine - Biology

"Gastrulation and the Formation of Endoderm,"
Z. S. Katsnel'son, Leningrad, 8 pp

"Uspekhi Sovrem Biol" Vol XXV, No 2

Discusses gastrulation and indicates some errors in existing concepts of this process. Accepts views of K. Peter on existence of primary and secondary endoderms, with certain reservations.

3/49T64

KATSNEL'SON, Z. S.

"Size Attained by the Caudal End of the Notochord in Tailless Amphibia," Dok.AN, 61, No.4, 1948. Chair of Gen. Biol., Naval Med. Acad. c1948-.

"The Influence of Lithium Salts in the Out-come of Histo-Genetic Occurrences in Urodelium," Dok. AN, 28, No. 3, 1940. (Lab. of General Biol. of the Third Medical Inst. in Leningrad. c1940-.)

KATSNEL'SON, E. S.

USSR/Medicine - Amphibians, Cytology
Medicine - Embryology

"Functorial Characteristics of the Cytoplasm in the Amphibian Embryo During the Early Stages of Development," E. S. Katsnel'son, Nav Med Acad, 2 3/4 pp

PA 53/49T58

"Dok Ak Nauk SSSR" Vol LXII, No 5

Functorial peculiarities are without doubt related to presence of a large amount of yolk in the cytoplasm of embryonal cells in amphibia, but do not depend wholly on this circumstance. This peculiarity has not been found in birds whose cells in

53/49T58

USSR/Medicine - Amphibians, Cytology (Contd) Oct 48

early stages also contain yolk impurities. Submitted by Acad I. A. Orbeli, 4 Aug 48.

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KATSNEL'SON, Z. S.

24257 KATSNEL'SON, Z. S. Opyt primeneniya Khimicheskikh vozdeystviy dlya eksperimental'nogo izucheniya gistogeneza. Trudy Akad. med. nauk SSSR, T. III, 1949, S. 45-52.

SO: Letopis, No. 32, 1949.

KATSNEL'SON, Z.S.

Amitotic division of nerve cells in cerebrospinal ganglions. Doklady Akad.nauk SSSR 76 no.6:889-891 21 Feb 51. (CLML 20:6)

1. Presented by Academician A.I.Abrikosov 29 December 1950.